### **Installation Instructions**



### 3-PIECE UNLOADER PLUNGERS KIT FOR TU-FLO® COMPRESSORS

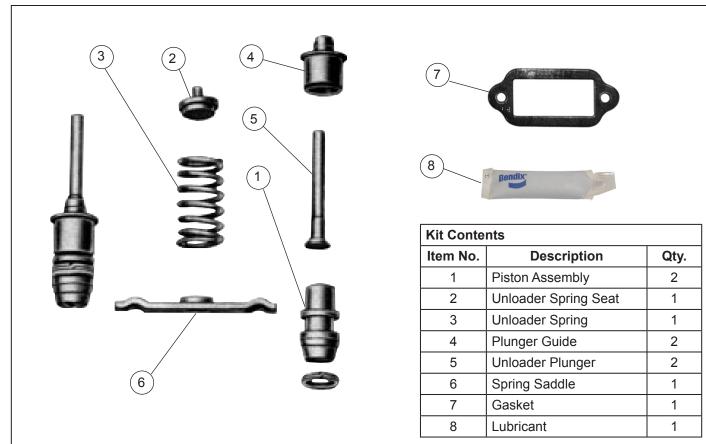


Figure 1 - Unloader Kit Contents

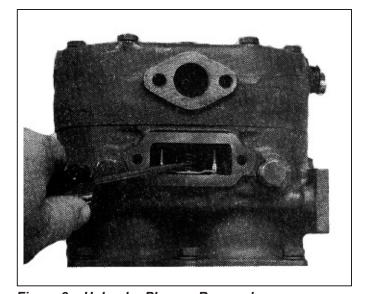


Figure 2 – Unloader Plunger Removal

Insert a screwdriver blade under the unloader spring (3) and raise the spring to remove it.

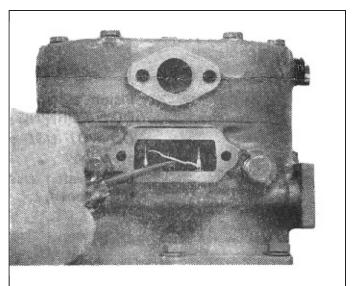


Figure 3 – Spring Saddle Removal

Raise the spring saddle (6) and remove it from the unloader plunger (5).

# A

#### **GENERAL SAFETY GUIDELINES**



## WARNING! PLEASE READ AND FOLLOW THESE INSTRUCTIONS TO AVOID PERSONAL INJURY OR DEATH:

When working on or around a vehicle, the following guidelines should be observed AT ALL TIMES:

- Park the vehicle on a level surface, apply the parking brakes and always block the wheels. Always wear personal protection equipment.
- ▲ Stop the engine and remove the ignition key when working under or around the vehicle. When working in the engine compartment, the engine should be shut off and the ignition key should be removed. Where circumstances require that the engine be in operation, EXTREME CAUTION should be used to prevent personal injury resulting from contact with moving, rotating, leaking, heated or electrically-charged components.
- ▲ Do not attempt to install, remove, disassemble or assemble a component until you have read, and thoroughly understand, the recommended procedures. Use only the proper tools and observe all precautions pertaining to use of those tools.
- ▲ If the work is being performed on the vehicle's air brake system, or any auxiliary pressurized air systems, make certain to drain the air pressure from all reservoirs before beginning ANY work on the vehicle. If the vehicle is equipped with a Bendix® AD-IS® air dryer system, a Bendix® DRM™ dryer reservoir module, or a Bendix® AD-9si® air dryer, be sure to drain the purge reservoir.
- ▲ Following the vehicle manufacturer's recommended procedures, deactivate the electrical system in a manner that safely removes all electrical power from the vehicle.
- Never exceed manufacturer's recommended pressures.

- Never connect or disconnect a hose or line containing pressure; it may whip and/or cause hazardous airborne dust and dirt particles. Wear eye protection. Slowly open connections with care, and verify that no pressure is present. Never remove a component or plug unless you are certain all system pressure has been depleted.
- ▲ Use only genuine Bendix® brand replacement parts, components and kits. Replacement hardware, tubing, hose, fittings, wiring, etc. must be of equivalent size, type and strength as original equipment and be designed specifically for such applications and systems.
- ▲ Components with stripped threads or damaged parts should be replaced rather than repaired. Do not attempt repairs requiring machining or welding unless specifically stated and approved by the vehicle and component manufacturer.
- ▲ Prior to returning the vehicle to service, make certain all components and systems are restored to their proper operating condition.
- ▲ For vehicles with Automatic Traction Control (ATC), the ATC function must be disabled (ATC indicator lamp should be ON) prior to performing any vehicle maintenance where one or more wheels on a drive axle are lifted off the ground and moving.
- ▲ The power MUST be temporarily disconnected from the radar sensor whenever any tests USING A DYNAMOMETER are conducted on a vehicle equipped with a Bendix®Wingman® system.
- ▲ You should consult the vehicle manufacturer's operating and service manuals, and any related literature, in conjunction with the Guidelines above.

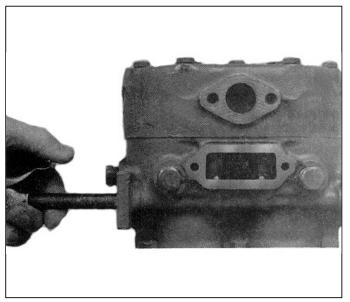


Figure 4 - Applying Shop Air Pressure

If the compressor is on the vehicle, build up the air pressure until the governor cuts out, thus raising the pistons (1). Use a pair of long nose pliers to grasp and remove the pistons (1). If the compressor has been removed from the vehicle, use a shop air line (as pictured above) to build the air pressure.

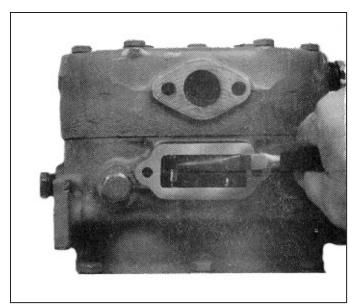


Figure 6 - Unloader Plunger Installation

Insert the plunger (5) into the guide (4). Hold the guide (4) and plunger (5) with a pair of long nose pliers and install over the unloader piston.

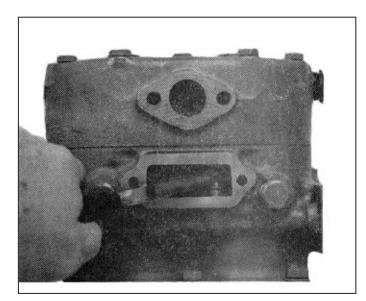


Figure 5 - Inserting Unloader Piston Assembly

The piston assembly (1) has been prelubricated. **DO NOT USE additional lubricant on the piston assembly (1).** Insert the piston assembly (1) in the unloader bore as pictured above.

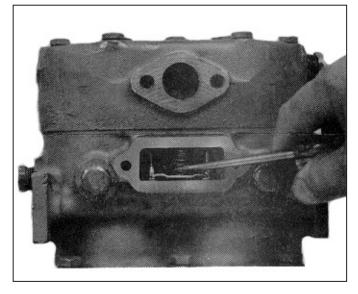
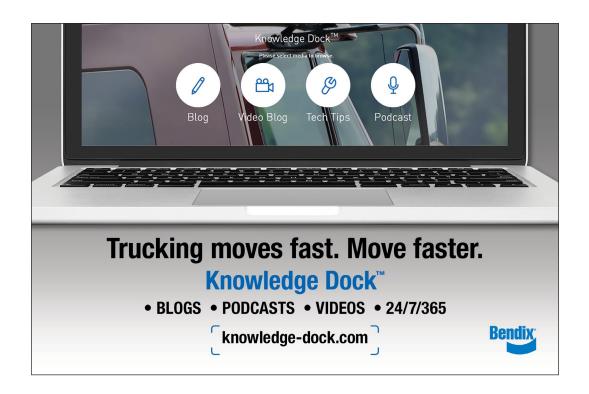


Figure 7 - Unloader Spring Installation

Be sure the unloader spring seat (2) is in place. An unloader spring (3) has been included in this kit in the event the spring (3) is lost during the installation of this kit. If needed, install the unloader spring saddle (6). Make certain ends of saddle (6) are up against the top of the guide. Now install the unloader spring.

#### **COMPRESSOR TESTING**

Test the compressor per the procedures in the Service Data Sheet for the appropriate compressor model. Service Data Sheets are available for download on bendix.com.





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